

IN THE SPECIFICATION

Paragraph beginning at page 5, line 11 (amended):

The invention will subsequently be explained in detail with reference to an embodiment. It describes the supply of gasification medium into an industrial BGL gasifier for gasifying extremely heterogeneous waste substances. The GM mixture supplied to the BGL gasifier via a total of 6 GM nozzles consists of 6,000 Nm³/h oxygen and 5,700 kg/h vapor. The GM nozzles constitute one-component nozzles of circular nozzle cross-section. ~~The~~ Figure 1 shows a schematic representation of the section through the front end of the GM nozzle 1. The cooling jacket surrounding the GM supply tube 2 is not represented for simplicity. To the GM supply tube 2 GM mixture 3 is supplied with a temperature of 260°C. In the gas space of the air-blast tuyere 4 a pressure of 25 bar(a) and a mean temperature of 2,100°C exist. In accordance with the invention, the inner nozzle contour consists of two portions, the cylindrical supply portion 5 and the acceleration portion 7 conically tapering towards the nozzle orifice 6, which acceleration portion constitutes a welded sleeve. The place where the acceleration portion 7 begins is referred to as transition 9. The transition 9 represents an abrupt reduction of the diameter from 25 to 24 mm. The GM mixture 3 flows through the supply portion 5 with a GM isorate of 104 m/s (300°C, 25 bar(a)). From the transition 9 up to the exit from the nozzle orifice 6, which has a diameter of 19 mm, the GM isorate is accelerated continuously in the acceleration portion 7. The GM jet 10 leaves the nozzle orifice 6 with a GM isorate of 179 m/s. The length of the acceleration portion is 23.8 mm, the cone angle hence is defined to be 6°. In front of the nozzle orifice 6, the acceleration of the GM jet 10 continues for a distance of a few millimeters and in the focus 11 reaches the maximum GM isorate and the lowest static pressure.